

IFW16

RAW SEQUENCE LISTING

DATE: 09/24/2004

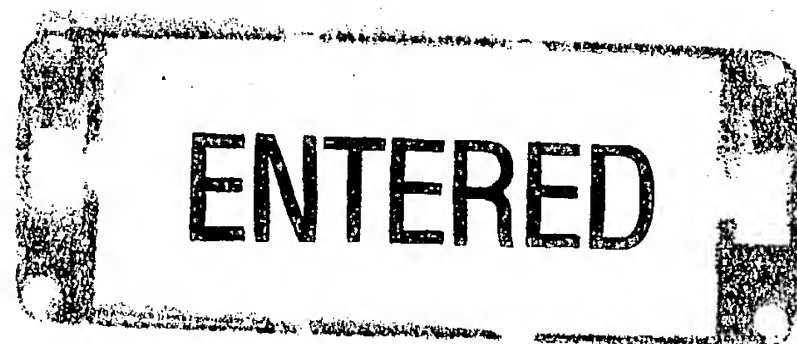
PATENT APPLICATION: US/10/054,665A

TIME: 11:46:26

Input Set : A:\875007US2.txt

Output Set: N:\CRF4\09242004\J054665A.raw

4 <110> APPLICANT: Engelhardt, John F.
 5 Duan, Dongshen
 6 University of Iowa Research Foundation
 9 <120> TITLE OF INVENTION: Adeno-associated virus vectors
 12 <130> FILE REFERENCE: 875.007US2
 C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/054,665A
 15 <141> CURRENT FILING DATE: 2002-01-22
 17 <150> PRIOR APPLICATION NUMBER: US 60/086,166
 18 <151> PRIOR FILING DATE: 1998-05-20
 20 <150> PRIOR APPLICATION NUMBER: US 09/276,625
 21 <151> PRIOR FILING DATE: 1999-03-25
 23 <160> NUMBER OF SEQ ID NOS: 14
 25 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 27 <210> SEQ ID NO: 1
 28 <211> LENGTH: 20
 29 <212> TYPE: DNA
 30 <213> ORGANISM: Adeno-associated virus
 32 <400> SEQUENCE: 1
 33 cggggggtcgt tgggcgggtca 20
 35 <210> SEQ ID NO: 2
 36 <211> LENGTH: 19
 37 <212> TYPE: DNA
 38 <213> ORGANISM: Adeno-associated virus
 40 <400> SEQUENCE: 2
 41 gggcggagcc tatggaaaa 19
 43 <210> SEQ ID NO: 3
 44 <211> LENGTH: 505
 45 <212> TYPE: DNA
 46 <213> ORGANISM: Artificial Sequence
 48 <220> FEATURE:
 49 <223> OTHER INFORMATION: A synthetic consensus sequence
 51 <400> SEQUENCE: 3
 52 cggggggtcgt tgggcgggtca gccaggcggg ccatttaccg taagttatgt aacgactgca 60
 53 ggcattgcaag ctccaattca tcggtagata agtagcatgg cgggttaatc attaactaca 120
 54 aggaaccct agtgatggag ttggccactc cctctctgcg cgctcgctcg ctgctgagg 180
 55 ccgggcgacc aaaggtcgcc cgacgcccgg gctttgcccg ggcggcctca gtgagcgagc 240
 56 gagcgcgcag ctgcgcgctc gctcgctcac tgaggccgcc cgggcaaagc ccgggcgctc 300
 57 ggcgaccttt ggtcgcccgg cctcagcgag cgagcgagcg cgcagagagg gaggggccaa 360
 58 ctccatcact aggggttctt ttagtagtaat gattaaccgc ccatgctact tatctacagc 420
 59 ttgcatgcat gtgagcaaaa ggccagcaaa aggccaggaa ccgtaaaaag gccgcgttgc 480
 60 tggcggttttt ccataggctc cgccc 505
 65 <210> SEQ ID NO: 4
 66 <211> LENGTH: 272



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67 <212> TYPE: DNA
68 <213> ORGANISM: AAV circular intermediate, clone p81
70 <400> SEQUENCE: 4
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72 tgatggagtt ggccactccc tctctgcgcg ctgcctcgt cactgaggcc gggcgcccaa      120
73 aggtcgcccg acgcccgggc tttgcccggg cggcctcagt gagegagcga gcgcgcagag      180
74 agggagtggc caactccatc actaggggtt ccttgtagtt aatgattaac ccgccatgct      240
75 acttatctac cgatgaattc gagcttgcat gc                                272
77 <210> SEQ ID NO: 5
78 <211> LENGTH: 300
79 <212> TYPE: DNA
80 <213> ORGANISM: AAV circular intermediate, clone p79
82 <400> SEQUENCE: 5
83 gcatgcaagc tgtagataag tagcatggcg ggttaatcat taactacaag gaacccttag      60
84 tgatggagtt ggccactccc tctctgcgcg ctgcctcgt cactgaggcc gggcgcgcg      120
85 tcgctcgtc actgaggccg ggcgaccaa ggctcgccga gcccgggctt tgcccgggcg      180
86 gcctcagtga gcgagcgcg gcgcagagag ggagtggcca actccatcac taggggttcc      240
87 ttgtagttaa tgattaaccc gccatgctac ttatctaccg atgaattcga gcttgcatgc      300
89 <210> SEQ ID NO: 6
90 <211> LENGTH: 272
91 <212> TYPE: DNA
92 <213> ORGANISM: AAV circular intermediate, clone p1202
94 <400> SEQUENCE: 6
95 gcatgcaagc tgtagataag tagcatggcg ggttaatcat taactacaag gaacccttag      60
96 tgatggagtt ggccactccc tctctgcgcg ctgcctcgt cactgaggcc gggcgaccaa      120
97 aggtcgcccg acgcccgggc tttggtcgcc cggcctcagt gagegagcga gcgcgcagag      180
98 agggagtggc caactccatc actaggggtt ccttgtagtt aatgattaac ccgccatgct      240
99 acttatctac cgatgaattc gagcttgcat gc                                272
101 <210> SEQ ID NO: 7
102 <211> LENGTH: 165
103 <212> TYPE: DNA
104 <213> ORGANISM: Unknown
106 <220> FEATURE:
107 <223> OTHER INFORMATION: SEQ ID NO:1 of U.S. Patent No. 5,478,745
109 <400> SEQUENCE: 7
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111 ccgggcgacc aaaggtcgcc cgacgcccgg gctttgcccg ggcggcctca gtgagcgagc      120
112 gagcgcgag agagggagtg gccaaactca tcaactagggg ttcct                                165
114 <210> SEQ ID NO: 8
115 <211> LENGTH: 282
116 <212> TYPE: DNA
117 <213> ORGANISM: rAAV circular intermediate, clone p79
119 <400> SEQUENCE: 8
120 ggcggggccat ttaccgtaag ttatgtggcg actgcaggca tgcaagctcg aattcatcgg      60
121 tagataagta gcatggcggg ttaatcattg cctacaaaga gcccttagtg atggagtggg      120
122 ccaactccctc tcttcgccga gcgcgcagag agggagtggc caactccctc actaggggtt      180
123 cctggcagtt aatgattaac ccgccatgct acttatctac agcttgcatg catgtgagca      240
124 aaaggccagc aaaaggccag gaaccgtaaa aaggccgcgt tg                                282
127 <210> SEQ ID NO: 9

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128 <211> LENGTH: 345
129 <212> TYPE: DNA
130 <213> ORGANISM: rAAV circular intermediate, clone p80
132 <400> SEQUENCE: 9
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134 taagtagcat ggcgggttaa tcattaacta caaggaaccc ctagtgatgg agttggccac      120
135 tccctctctg cgcgctcgct cgctcgctca ggccggggcg ccaaaggctg cccgacgccc      180
136 gcccggcctc agcgagcgag cgagcgcgca gagagggagt ggccaactcc atcactaggg      240
137 gttccttgta gttaatgatt aacccgccat gctacttatt tacagcttgc atgcatgtga      300
138 gcaaaaaggcc agcaaaaaggc caggaaccgt aaaaaggccg cgttg                      345
140 <210> SEQ ID NO: 10
141 <211> LENGTH: 276
142 <212> TYPE: DNA
143 <213> ORGANISM: rAAV circular intermediate, clone p81
145 <400> SEQUENCE: 10
146 ggccattttac cgtaagttat gtggcgactg caggcatgca agctcgaatt catcggtaga      60
147 taagtagcat ggcgggttaa tcattgccta caaagagccc ctagtgatgg agcccggcct      120
148 caccgagcga gcgagcgcg agagagggag tggccaactc catcactagg ggttccttgt      180
149 agttaatgat taacccgcc tgcacttatt ctacagcttg catgcatgtg agcaaaaaggc      240
150 cagcaaaaagg ccaggaaccg taaaaaggcc gcgttg                      276
152 <210> SEQ ID NO: 11
153 <211> LENGTH: 316
154 <212> TYPE: DNA
155 <213> ORGANISM: rAAV circular intermediate, clone p86
157 <400> SEQUENCE: 11
158 ggccattttac cgtaagttat gtaacgactg caggcatgca agctcgaatt catcggtaga      60
159 taagtagcat ggcgggttaa tcattaacta caaggaaccc ctagtgatgg agttggccac      120
160 tccctctctg cgcgctcgct cgctcgctga ggccgccccg gcctcagcga gcgagcgagc      180
161 gcgagagag ggactggcca actccatcac taggggttcc ttgtagttaa tgattaaccc      240
162 gccatgctac ttatctacag cttgcatgca tgtgagcaaa aggccagcaa aaggccagga      300
163 accgtaaaaa ggccgc                      316
165 <210> SEQ ID NO: 12
166 <211> LENGTH: 208
167 <212> TYPE: DNA
168 <213> ORGANISM: rAAV circular intermediate, clone p87
170 <400> SEQUENCE: 12
171 ggccattttac cgtaagttat gtaacgactg caggcatgca agctcgaatt catcggtaga      60
172 taagtagcat ggcgggttac tcattgccta caaagagccc ctagtgatgg aattggaatg      120
173 attcaccctc catgctactt atctacagct tgcattgatg tgagcaaaaagg gccagcaaaa      180
174 ggccaggaac cgtaaaaagg ccgcgttg                      208
176 <210> SEQ ID NO: 13
177 <211> LENGTH: 310
178 <212> TYPE: DNA
179 <213> ORGANISM: rAAV circular intermediate, clone p88
181 <400> SEQUENCE: 13
182 gccattttacc gtaagttatg taacgactgc aggcattgcaa gctcgaattc atcggtagat      60
183 aagtagcatg gcgggttaat cattgcctac aaagagcccc tagtgatgga gttggccact      120
184 ccctctctgc gcgctcgctc gctggggccc gcctcagcga gcgagcgagc gcgcagagag      180
185 ggagtggcca actccatcac taggggttcc ttgtagttaa tgattaaccc gccatgctac      240

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186 ttatctacag cttgcatgca tgtgagcaaa aggccagcaa aaggccagga accgtaaaaa 300
187 ggccgcggttg 310
189 <210> SEQ ID NO: 14
190 <211> LENGTH: 334
191 <212> TYPE: DNA
192 <213> ORGANISM: Artificial Sequence
194 <220> FEATURE:
195 <223> OTHER INFORMATION: A synthetic portion of the consensus sequence
197 <400> SEQUENCE: 14
198 gtagataagt agcatggcgg gttaatcatt aactacaagg aacccttagt gatggagttg 60
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200 cgcccgggct ttgcccgggc gccctcagtg agcgagcgag cgcgcagctg cgcgctcgct 180
201 cgctcactga ggccgcccgg gcaaagcccg ggcgtcgggc gacctttggt cgcccggcct 240
202 cagcgagcga gcgagcgcgc agagagggag tggccaactc catcactagg ggttccttgt 300
203 agttaatgat taaccgcca tgctacttat ctac 334
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VERIFICATION SUMMARY

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L:14 M:270 C: Current Application Number differs, Replaced Current Application Number